

INTERNAL SEARCH REPORT

PCT/GB 03/01650

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N5/06 C12P21/08 C12N15/00 A01K67/027 C07K16/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>THEISEN MANFRED ET AL:                      "Trans-immortalization strategies in transgenics."                      1995, STRATEGIES IN TRANSGENIC ANIMAL SCIENCE., PAGE(S) 311-324, AMERICAN SOCIETY FOR MICROBIOLOGY (ASM) BOOKS DIVISION, 1325 MASSACHUSETTS AVE. NW, WASHINGTON, DC 20005-4171, USA XP009014736                      ISBN: 1-55581-096-9                      the whole document</p> <p style="text-align: center;">--- -/-</p>	1-29, 31, 34, 35

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*8\* document member of the same patent family

Date of the actual completion of the international search

29 July 2003

Date of mailing of the international search report

14/08/2003

Name and mailing address of the ISA

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Authorized officer

Vix, O

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PAVIRANI A ET AL: "RECOMBINANT PROTEINS OF THERAPEUTIC INTEREST EXPRESSED BY LYMPHOID CELL LINES DERIVED FROM TRANSGENIC MICE" BIO/TECHNOLOGY, NATURE PUBLISHING CO. NEW YORK, US, vol. 7, no. 10, 1 October 1989 (1989-10-01), pages 1049-1054, XP000054645 ISSN: 0733-222X see page 1049, in part. right col., and Figure 1 and page 1050-51.	1-29, 31, 34, 35
Y	KNOTT CHRISTINE L ET AL: "Evaluation of Bcl-2/B cell transgenic mice (B6) for hybridoma production." HYBRIDOMA, vol. 15, no. 5, 1996, pages 365-371, XP009014746 ISSN: 0272-457X see Material and Methods and pages 367-369	1-29, 31, 34, 35
A	WO 99 45962 A (BALL WILLIAM J JR ; FISHWILD DIANNE M (US); GENPHARM INT (US); LONB) 16 September 1999 (1999-09-16) the whole document	1-29, 31, 34, 35
A	US 6 358 737 B1 (KATO YOICHI ET AL) 19 March 2002 (2002-03-19) the whole document	1-29, 31, 34, 35
A	JAISSE FREDERIC: "Inducible gene expression and gene modification in transgenic mice." JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, vol. 11, no. Supplement 16, November 2000 (2000-11), pages S95-S100, XP002249422 ISSN: 1046-6673 the whole document	1-29, 31, 34, 35
A	RYDING A D S ET AL: "Conditional transgenic technologies." JOURNAL OF ENDOCRINOLOGY, vol. 171, no. 1, October 2001 (2001-10), pages 1-14, XP002249421 ISSN: 0022-0795 the whole document	1-29, 31, 34, 35

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ALBANESE CHRIS ET AL: "Recent advances in inducible expression in transgenic mice." SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY, vol. 13, no. 2, April 2002 (2002-04), pages 129-141, XP002249423 Apr., 2002 ISSN: 1084-9521 the whole document -----	1-29,31, 34,35

## INTERNATIONAL SEARCH REPORT

PCT/G8 03/01650

**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 30, 32-33  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 30,32-33

Present claims 32-33 relate to a products defined by reference to desirable characteristics or property, namely "cell derived from a transgenic animal...and the cell is capable of changing to a non-immortalised state in absence of stimulus".

The claims cover all antibody secreting cells having this characteristic, whereas the application provides support and / or disclosure within the meaning of Art. 5 and 6 PCT for only a very limited number of such cells. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those cells prepared/tested in the examples.

The same reasoning applies for the "reach-through" claim 30 which claims all possible clonal populations obtained by methods of claim 3-28. Besides it is noted, that the cells of claim 30 are not rendered novel just because of the fact that they have been identified by the methods of claims 1-28 , e.g. such cells can already exist. (Apart from this, it is also not possible to establish the scope of these claims without testing all clonal population of immortalised antibody secreting cells, clearly an undue burden).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

## INTERNATIONAL SEARCH REPORT

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9945962	A	16-09-1999	US 6255458 B1	03-07-2001
			AU 3086499 A	27-09-1999
			WO 9945962 A1	16-09-1999
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US 6358737	B1	19-03-2002	NONE	
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